

CLAIMS

1. A process for bleaching a cellulosic fibre material with a peroxide compound in an aqueous alkaline medium, comprising a bleaching step wherein
 - a) a first polymer (A) comprising a homopolymer of acrylic acid, methacrylic acid or maleic acid, or a copolymer of acrylic acid and/or methacrylic acid with an unsaturated dicarboxylic acid, and
 - a solution of a second polymer (B) comprising a poly- α -hydroxyacrylic acid or a salt thereof,
 - are added to a cellulosic fibre material, and
 - 10 b) thereafter adding a peroxide compound and an alkaline substance and carrying out the bleaching.
2. The process of claim 1 wherein the bleaching is carried out in the absence of a nitrogen-containing chelating agent.
3. The process of claim 1 or 2 wherein the bleaching is carried out in the absence of added calcium and/or magnesium ions.
- 15 4. The process of any of claims 1 to 3 wherein the polymers (A) and (B) are added in the form of a solution containing both polymers.
5. The process of claim 4 wherein the polymer solution has a pH of at most 7, preferably at most 6, and more preferably at most 5.
- 20 6. The process of any of claims 1 to 5 wherein the first polymer (A) comprises a raw polymer obtained from the homopolymerization of acrylic acid, methacrylic acid or maleic acid or from the copolymerization of acrylic acid and/or methacrylic acid with an unsaturated dicarboxylic acid, said raw polymer having a pH of below 7, preferably below 6, and more preferably below 5.
- 25 7. The process of any of claims 1 to 6 wherein the first polymer (A) has a molecular weight of at least 4000, preferably at least 10000, and more preferably at least 30000.
8. The process of any of claims 1 to 7 wherein the second polymer (B) has a molecular weight of at least 5000, preferably at least 10000, and more preferably at least 15000.
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9. The process of any of claims 1 to 8 wherein the first polymer (A) comprises a copolymer of acrylic acid and/or methacrylic acid with maleic acid, wherein the molar ratio of acrylic acid and/or methacrylic acid to maleic acid is from 80:20 to 20:80, preferably from 70:30 to 50:50.
- 5 10. The process of any of claims 1 to 9 wherein the share of the second polymer (B) is from 1 to 50% by weight of the total amount of the first and second polymers (A) and (B).
- 10 11. The process of any of claims 1 to 10 wherein the polymers (A) and (B) as active material are added in a total amount of 0.05 to 10 kg per ton of dry cellulosic fibre material, preferably in an amount of 0.1 to 5 kg per ton of dry cellulosic fibre material.
12. The process of any of claims 1 to 11 wherein the cellulosic fibre material comprises a chemical, mechanical, chemi-mechanical or deinked pulp.